

Notice of Allowability	Application No.	Applicant(s)	
	10/777,053	SIMARD ET AL.	
	Examiner	Art Unit	
	F. Pierre VanderVegt	1644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to papers filed 1/12/2007.
2. ☒ The allowed claim(s) is/are 1,4-8,11-17,19,21,23-26 and 35-39.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>20070319</u> . |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date <u>20061204, 20070205</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

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EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with marc Morley on March 16, 2007.

The application has been amended as follows:

IN THE CLAIMS:

Claims 9, 10, 18 and 28-34 have been canceled without disclaimer.

In claim 1, line 3, both recitations of "first sequence" have been replaced by --first nucleic acid sequence--.

In claim 4, line 3, both recitations of "first sequence" have been replaced by --first nucleic acid sequence--.

In claim 4, line 5, the superfluous recitation of "or encoding" has been deleted.

In claim 4, line 8, the recitation of "first sequence" has been replaced by --first nucleic acid sequence--.

In claim 19, line 3, the recitation of "first sequence" has been replaced by --first nucleic acid sequence--.

In claim 19, line 4, the recitation of "first sequence" has been replaced by --first nucleic acid sequence--.

In claim 19, line 9, both recitations of "second sequence" have been replaced by --second nucleic acid sequence--.

In claim 21, line 2, the recitation of "sequences" has been replaced by --nucleic acid sequences--.

Claim 27 has been canceled and replaced by the following new independent claim:

--35. (New) An expression vector comprising:

a reading frame, wherein said reading frame does not encode a whole tumor associated antigen, wherein the reading frame comprises a first sequence, wherein said first sequence encodes one or more segments of tumor-associated antigen SSX-2 (SEQ ID NO: 40), and wherein each segment comprises an epitope cluster, said cluster comprising at least two amino

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acid sequences having a known or predicted affinity for a same MHC receptor peptide binding cleft, wherein said expression vector comprises a promoter operably linked to said reading frame, further comprising a second nucleic acid sequence, wherein the second nucleic acid sequence encodes an array of epitopes, wherein the array of epitopes comprises a housekeeping epitope that can be liberated by immunoproteasomal processing, directly or in combination with N-terminal trimming or the action of exogenous enzymatic activities.--

The following new claims have been added.

- 36. (New) The expression vector of claim 35, wherein said first and second nucleic acid sequences constitute a single reading frame.
37. (New) An immunogenic composition comprising the expression vector of claim 35.
38. (New) An immunogenic composition comprising the expression vector of claim 4.
39. (New) An immunogenic composition comprising the expression vector of claim 19.--

No new matter has been introduced by these amendments.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to F. Pierre VanderVegt whose telephone number is (571) 272-0852. The examiner can normally be reached on M-Th 6:30-4:00 and Alternate Fridays 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan can be reached on (571) 272-0841. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

F. Pierre VanderVegt, Ph.D. *PV*
Patent Examiner
March 19, 2007

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